**Purpose:**

Create new summary variables for total wear counts, total wear minutes, counts per minute (CPM), and intensity-specific PA for window 06:00:00 thru 23:59:59 (thereby excluding potential error introduced if monitor is not removed during sleeping at night), using 480 minutes/day as wear time criteria.

* **Step 1 Create total counts and wear minutes for every day in 06:00 – 23:59 window**
  + Create **total counts Monday (tot\_counts\_mon)** by summing wear counts Monday hour 6 thru hour 23 (WearCountsMondayHour6-WearCountsMondayHour23)
  + Repeat for every day
  + Create **total wear minutes Monday (tot\_min\_mon)** by summing wear counts Monday hour6 thru hour 23 (rsum(WearMinutesMondayHour6-WearMinutesMondayHour23)
  + Repeat for every day of the week
* **Step 2 Determine if day is valid using 480 min/day as the criteria**
  + Generate new variable (val\_mon, val\_tues. etc) that indicates if each day have a total number of wear minutes (tot\_min\_mon) above criteria (1=valid, 0=not valid).
  + Repeat for every day of the week
* **Step 3 Create new variable for number of valid days**
  + Generate new\_valid\_days by summing val\_mon, val\_tues, val\_wed, val\_thurs, val\_fri, val\_sat, and val\_sun.
  + Set wear counts from days deemed not valid to missing.
  + Set wear minutes from days deemed not valid to missing.
* **Step 4 Generate new variable for total wear counts, total wear minutes, and counts per minute across valid days**
  + Sum tot\_counts\_mon - tot\_counts\_sun
  + Sum tot\_min\_mon - tot\_min\_sun)
  + Generate new CPM by new\_total\_counts / new\_total\_wear\_minute
  + Generate new total wear minutes per valid day by new\_total\_wear\_minutes / new\_valid\_days
* **Step 5 Generate intensity-specific minutes using "insert applicable cut-points" (example using Evenson Sedentary)**
  + Create number of sedentary minutes for each day (tot\_sed\_mon, etc) by summing Evenson\_SEDMinutesMondayHour6-Evenson\_SEDMinutesMondayHour23
  + Repeat this for every day of the week
  + Set tot\_sed\_mon, etc, to missing if day is not valid (replace tot\_sed\_mon = . if val\_mon !=1)
  + Generate sedentary minutes total (new\_tot\_sed) by summing tot\_sed\_mon-tot\_sed\_sun
  + Generate Sedentary minutes AVERAGE PER VALID DAY (new\_sed\_per\_day ) by new\_tot\_sed/new\_valid\_days
* **Step 7: Repeat step 6 for each included cut-point. To create summary variables for weekdays and weekend, repeat steps 1-6 for weekdays (Mon-Fri) and weekend days (Sat-Sun).**